

# ESOHMS UNIVERSAL WASTE MANAGEMENT TRAINING

Rev.

2/2014

Hard copies of this document  
may not be the current  
version. Refer to the “I Am  
The Key” to verify the current  
version

# Introduction

- The following information is part of your Environmental, Safety and Occupational Health Management System (ESOHMS).
- Remember that YOU are the key to maintaining a safe and healthy work environment.
- Goto <http://www.strategicmaterials.dla.mil/iamthekey/Pages/default.aspx> for more information on the ESOHMS and our environmental, safety and occupational health policies.

# What Are Universal Wastes?

The federal Universal Waste rule is described in federal regulation 40 CFR 273

- A. Any burned out or discarded electric lamp that contains mercury, lead or other constituent that would cause it to be a hazardous waste if disposed:
- fluorescent
  - high pressure sodium
  - high intensity discharge
  - mercury vapor
  - metal halide
  - neon

# What Are Universal Wastes? (continued)

- B. Any spent or discarded battery that contains hazardous constituents that would cause it to be a hazardous waste if disposed:
- lithium
  - mercuric oxide
  - nickel cadmium
  - silver oxide
  - lead acid batteries may be managed as universal wastes if not managed under 40 CFR 266

# What Are Universal Wastes? (continued)

- C. Recalled pesticides, or stocks of unused pesticides collected under a waste pesticide collection program
- D. Used or discarded mercury switch thermostats

# Determining Universal Waste

- How do I know if my used lamps, batteries or other possible universal wastes are hazardous wastes?
  - They can be tested using the Toxicity Characteristic Leaching Procedure (TCLP) EPA Method 1311.  
Note: Since testing is expensive, generator knowledge is better.

# Determining Universal Waste

(continued)

- **Is there any other way to tell if my wastes are hazardous?**
  - Some manufacturers of products that can become universal wastes when spent or discarded provide SDS data about their products (generator knowledge).
- **If my wastes are not hazardous, how must they be disposed?**
  - Non-hazardous wastes may be recycled or disposed along with other solid waste (trash).

# Managing Universal Wastes

1. Each depot should develop a recycling program that can be supported by local/county/state resources. Note that Small Quantity Handlers of Universal Wastes (<11,000 pounds) are exempt from 40 CFR 273.32 Notification Requirements.
2. Collect and accumulate your universal wastes in a protected area on-site - do not throw them out with other trash.
3. Package or containerize all universal wastes in structurally sound containers to protect them from breaking or leaking (use original shipping containers if practicable).



# Managing Universal Wastes (continued)

4. Label the container as “Universal Waste” and indicate the type of material (“batteries”, “lamps”, “thermostats”, etc.)
5. Be prepared with emergency response equipment and training in the event there is a spill, release or accident involving your universal wastes.
6. In the event of a release, contain it to prevent the release of hazardous constituents to the environment.
7. Accumulate universal wastes for no more than one year. Mark the initial accumulation date on the collection container.

# Managing Universal Wastes (continued)

8. Do not accumulate more than 11,000 pounds collectively of universal waste at one time unless you are a registered Universal Waste Handler.
9. When ready for disposal, send your universal wastes to a recycler or permitted disposal facility using a Universal Waste Handler. Make sure all shipments conform to DOT requirements for that material.
10. Ensure that the destination facility has accepted your universal waste.

# Managing Universal

## Wastes (continued)

- You can NOT dispose, treat or dilute universal wastes at your site unless you are a registered Universal Waste Handler.
- Batteries may be sorted, combined in containers, disassembled and removed from products.
- Mercury ampules may be removed from thermostats over containment devices as long as there are provisions for clean-up of any spill.
- Universal wastes DO NOT count when determining your status as a hazardous waste generator.

# Managing Universal Wastes (continued)

- Spent aerosol cans must be safely punctured, the residual contents must be contained, and the excess propellant be filtered. We can purchase special devices for this purpose. The spent aerosol cans (punctured & drained) can be sold as scrap through the DRMS.

# Shipment and Transportation

- Only universal waste handlers may transport universal wastes off-site.
- Universal waste shipments must comply with DOT hazardous materials regulations (49 CFR 171 through 180), with the following exception:
  - most shipments of waste lamps and waste dry batteries are not DOT hazardous materials.

# Emergency Response

- Residues from an accident or spill should be cleaned up immediately. Proper equipment should be used. For mercury-free lamps, a broom and dust pan are adequate.
- In some states these residues are automatically hazardous waste; if so, the residues must be disposed as hazardous waste in accordance with state or federal regulations. Check with our Environmental Officer for guidance on proper disposal of residues.

# A Note of Thanks:

- Thank you for your time and attention.
- Please sign the attendance roster to ensure you get credit for your participation.
- Remember that our ESOHMS can be found on the <http://www.strategicmaterials.dla.mil/iamthekey/Pages/default.aspx> website.
- Remember also that each of us is “the key” to successful implementation of our environmental, safety and occupational health policies and our ESOHMS.

# We Welcome Your Questions and Comments!

Please forward any comments or questions on this presentation to your supervisor or the Environmental Staff Officer. They will obtain answers to your questions for you, and we will incorporate that information into future presentations, as part of the ESOHMS continual